

In-dash 7"Widescreen Color LCD Monitor/DVD Receiver Moniteur vidéo couleur grand-écran à écran à cristaux liquides de 7 pouces/récepteur DVD intégrés en tableau de bord Monitor LCD en color de pantalla panorámica de 7"/receptor y DVD empotrado en el tablero de instrumentos

Model: CQ-VX100U

Operating Instructions Manuel d'instructions Manual de Instrucciones















- Please read these instructions (including "Limited Warranty" and "Customer Services Directory") carefully before using this product and keep this manual for future reference.
- Prière de lire attentivement ces instructions (y compris la "Garantie limitée" et le "Répertoire des services à la clientèle") avant d'utiliser ce produit et conserver ce manuel d'utilisation pour s'y référer ultérieurement.
- Lea estas instrucciones cuidadosamente antes de usar este producto y guarde este manual para usar como referencia futura.

Safety Information

Read the operating instructions for the unit and all other components of your car audio system carefully before using the system. They contain instructions about how to use the system in a safe and effective manner. Panasonic assumes no responsibility for any problems resulting from failure to observe the instructions given in this manual.



This pictograph intends to alert you to the presence of important operating instructions and installation instructions. Failure to heed the instructions may result in severe injury or death.

A Warning

Observe the following warnings when using this unit.

The driver should neither watch the display nor operate the system while driving.

Watching the display or operating the system will distract the driver from looking ahead of the vehicle and can cause accidents. Always stop the vehicle in a safe location and use the parking brake before watching the display or operating the system.

- □ Use the proper power supply. This product is designed for operation with a negative grounded 12 V DC battery system. Never operate this product with other battery systems, especially a 24 V DC battery system.
- □ Protect the Deck Mechanism.

Do not insert any foreign objects into the slot of this unit.

Do not disassemble or modify the unit. Do not disassemble, modify the unit or attempt to repair the product yourself. If the product needs to be repaired, consult your dealer or an authorized Panasonic Servicenter.

- Do not use the unit when it is out of order. If the unit is out of order (no power, no sound) or in an abnormal state (has foreign objects in it, is exposed to water, is smoking, or smells), turn it off immediately and consult your dealer.
- Refer fuse replacement to qualified service personnel.

When the fuse blows out, eliminate the cause and have it replaced with the fuse prescribed for this unit by a qualified service engineer. Incorrect replacement of the fuse may lead to smoke, fire, and damage to the product. This manual uses pictographs to show you how to use the product safely and to alert you to potential dangers resulting from improper connections and operations. The meanings of the pictographs are explained below. It is important that you fully understand the meanings of the pictographs in order to use this manual and the system properly.



This pictograph intends to alert you to the presence of important operating instructions and installation instructions. Failure to heed the instructions may result in injury or material damage.

Observe the following warnings when installing.

Disconnect the lead from the negative (-) battery terminal before installation.

Wiring and installation with the negative (–) battery terminal connected may cause electrical shock and injury due to a short circuit.

Some cars equipped with the electrical safety system have specific procedures of battery terminal disconnection. FAILURE TO FOLLOW THE PROCEDURE MAY LEAD TO THE UNINTENDED ACTIVATION OF THE ELECTRICAL SAFETY SYSTEM RESULTING IN DAMAGE TO THE VEHI-CLE AND PERSONAL INJURY OR DEATH.

- Never use safety-related components for installation, grounding, and other such functions. Do not use safety-related vehicle components (fuel tank, brake, suspension, steering wheel, pedals, airbag, etc.) for wiring or fixing the product or its accessories.
- Installing the product on the air bag cover or in a location where it interferes with airbag operation is prohibited.
- □ Check for piping, gasoline tank, electric wiring, and other items before installing the product. If you need to open a hole in the vehicle chassis to attach or wire the product, first check where the wire harness, gasoline tank, and electric wiring are located. Then open the hole from outside if possible.
- Never install the product in a location where it interferes with your field of vision.
- Never have the power cord branched to supply other equipment with power.
- After installation and wiring, you should check the normal operation of other electrical equipment. The continuation of their using in abnormal conditions may cause fire, electrical shock or a traffic accident.
- In the case of installation to an airbag equipped car, confirm warnings and cautions of the vehicle manufacturer before installation.
- Make sure the leads do not interfere with driving or getting in and out of the vehicle.
- Insulate all exposed wires to prevent short circuiting.

2

A Caution

Observe the following cautions when using this unit.

□ Keep the sound volume at an appropriate level.

Keep the volume level low enough to be aware of road and traffic conditions while driving.

Do not insert or allow your hand or fingers to be caught in the unit.

To prevent injury, do not get your hand or fingers caught in moving parts or in the disc slot. Especially watch out for infants.

- This unit is designed for use exclusively in automobiles.
- Do not operate the unit for a prolonged period with the engine turned off.

Operating the audio system for a long period of time with the engine turned off will drain the battery.

Do not expose the unit to direct sunlight or excessive heat.

Otherwise these will raise the interior temperature of the unit, and it may lead to smoke, fire, or other damage to the unit.

Do not use the product where it will be exposed to water, moisture, or dust.

Exposure of the unit to water, moisture, or dust may lead to smoke, fire, or other damage to the unit. Make especially sure that the unit does not get wet in car washes or on rainy days.

Set the volume level to low enough before the AUX connection is completed.

Failure to observe this, the loud noise may come out and damage your speakers and your hearing. Direct connection of the speaker/headphone output of an external device without any attenuator may distort sound or damage the connected external device.

Observe the following cautions when installing.

Refer wiring and installation to qualified service personnel.

Installation of this unit requires special skills and experience. For maximum safety, have it installed by your dealer. Panasonic is not liable for any problems resulting from your own installation of the unit.

Follow the instructions to install and wire the product.

Not following the instructions to properly install and wire the product could cause an accident or fire.

\Box Take care not to damage the leads.

When wiring, take care not to damage the leads. Prevent them from getting caught in the vehicle chassis, screws, and moving parts such as seat rails. Do not scratch, pull, bend or twist the leads. Do not run them near heat sources or place heavy objects on them. If leads must be run over sharp metal edges, protect the leads by winding them with vinyl tape or similar protection.

□ Use the designated parts and tools for installation. Use the supplied or designated parts and appropriate tools to install the product. The use of parts other than those supplied or designated may result in internal damage to the unit. Faulty installation may lead to an accident, a malfunction or fire.

Do not block the air vent or the cooling plate of the unit.

Blocking these parts will cause the interior of the unit to overheat and will result in fire or other damage.

Do not install the product where it is exposed to strong vibrations or is unstable.

Avoid slanted or strongly curved surfaces for installation. If the installation is not stable, the unit may fall down while driving and this can lead to an accident or injury.

Installation Angle

The product should be installed in a horizontal position with the front end up at a convenient angle, but not more than 30°.

The user should bear in mind that in some areas there may be restrictions on how and where this unit must be installed. Consult your dealer for further details.

- Use wear gloves for safety. Make sure that wiring is completed before installation.
- To prevent damage to the unit, do not connect the power connector until the whole wiring is completed.
- Do not connect more than one speaker to one set of speaker leads. (except for connecting to a tweeter)

AUTION:

• PLEASE FOLLOW THE LAWS AND REGULATIONS OF YOUR STATE, PROVINCE OR COUNTRY FOR WIRING, INSTALLATION, AND USE OF THIS UNIT AND THE DEVICES TO BE CONNECTED.

Safety Information (continued)

THIS PRODUCT IS A CLASS I LASER PRODUCT. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS AND DO NOT REPAIR BY YOUR-SELF. REFER SERVICING TO QUALIFIED PERSONNEL.

The following applies only in the U.S.A.

Part 15 of the FCC Rules

FCC Warning:

Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

NOTICE:

This product has a fluorescent lamp that contains mercury.

Dispose may be regulated in your community due to environmental considerations. For disposal or recycling information, please contact your local authorities, or the Electronic Industries Alliance : http://www.eiae.org



This system is designed so that you cannot see moving pictures while you are driving.

- Park your car in a safe place and pull the side brake (parking brake) lever before watching the monitor.
- A rear monitor (option) displays moving pictures while driving.

Note:

 Be sure to connect the side brake (parking brake) connection lead. (→ Installation Instructions)

Notes on Use

Liquid Crystal Panel

- Do not cause impact to the liquid crystal panel.
- Usage temperature range: 0 °C to 40 °C

{32 °F to 104 °F} When the temperature is very cold or very hot, the image may not appear clearly or may move slowly. Also, movement of the image may seem to be out of synchronization or the image quality may decline in such environments. Note that this is not a malfunction or problem.

- In order to protect the liquid crystal panel, keep it out of direct sunlight while the unit is not in use.
- Sudden changes in the temperature inside the car such as those which occur immediately after the car's air conditioner or heater has been turned on may cause the inside of the liquid crystal panel to cloud over due to water vapor or it may cause condensation (droplets of water) to form and, as a result, the panel may not work properly. Do not use the unit while these symptoms are in evidence but leave the unit standing for about and hour, and then resume or start use.

Components

	1. Main Unit (LCD monitor/DVD player)	Qty.: 1
	2. Operating Instructions <yfm264c063ca></yfm264c063ca>	Qty.: 1
	3. System Upgrade Guidebook <yfm264c064ca></yfm264c064ca>	Qty.: 1
Present Boomst	4. Installation Instructions <yfm294c127ca></yfm294c127ca>	Qty.: 1
	5. Product Registration Card	Qty.: 1
	6. Customer Care Plan	Qty.: 1
	 7. Installation Hardware (screws cords, etc.) (→ Installation Instructions) 	5,

Note:

- The number in parenthesis underneath each accessory part name is the part number for maintenance and service.
- Accessories and their parts numbers are subject to modification without prior notice due to improvements.

Customer Services Directory

U.S.A.

Obtain Product Information and Operating Assistance; locate your nearest Dealer or Servicenter; purchase Parts and Accessories; or make Customer Service and Literature requests

by visiting our Web Site at:

http://www.panasonic.com/support

or, contact us via the web at:

http://www.panasonic.com/contactinfo

You may also contact us directly at:

1-800-211-PANA (7262),

Monday-Friday 9 am-9 pm; Saturday-Sunday 10 am-7 pm, EST.

For hearing or speech impaired TTY users, TTY : 1-877-833-8855

Accessory Purchases:

Purchase Parts, Accessories and Instruction Books online for all Panasonic Products by visiting our Web Site at:

http://www.pasc.panasonic.com

or, send your request by E-mail to:

npcparts@panasonic.com

You may also contact us directly at:

1-800-332-5368 (Phone) 1-800-237-9080 (Fax Only) (Monday-

Friday 9 am to 8 pm, EST.)

Panasonic Services Company 20421 84th Avenue South, Kent, WA 98032

(We accept Visa, MasterCard, Discover Card, American Express, and Personal Checks)

For hearing or speech impaired TTY users, TTY : 1-866-605-1277

Service in Puerto Rico

Panasonic Puerto Rico, Inc. Panasonic Sales Company Factory Servicenter: Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985 Phone (787) 750-4300, Fax (787) 768-2910

CANADA

WARRANTY SERVICE

FOR PRODUCT OPERATION ASSISTANCE, please contact: Our Customer Care Centre:

Telephone #:	(905) 624-5505
1-800 #:	1-800-561-5505
Fax #:	(905) 238-2360
Email link:	"Contact Us" on www.panasonic.ca

FOR PRODUCT REPAIRS, please locate your nearest Authorized Servicentre at www.panasonic.ca:

Link : "Servicentres™ locator" under "Customer support"

IF YOU SHIP THE PRODUCT TO A SERVICENTRE

Carefully pack and send prepaid, adequately insured and preferably in the original carton.

Include details of the defect claimed, and proof of date of original purchase.

Limited Warranty

U.S.A.

PANASONIC CONSUMER ELECTRONICS COMPANY, DIVISION OF PANASONIC CORPORATION OF NORTH AMERICA One Panasonic Way, Secaucus, New Jersey 07094

PANASONIC SALES COMPANY, DIVISION OF PANASONIC PUERTO RICO, INC. Ave. 65 de infanteria, Km. 9.5, San Gabriel Industrial Park Carolina, Puerto Rico 00985

PANASONIC AUTO PRODUCTS LIMITED WARRANTY

LIMITED WARRANTY COVERAGE

If your product does not work properly because of defects in materials and workmanship.

Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the warrantor") will, for the length of the period indicated in the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or refurbished product. The decision to repair or replace will be made by the warrantor.

Categories	Parts	Labor
Audio Components (except items listed below)	One (1) Year	One (1) Year
MXE Series Audio Components (except items listed below)	Two (2) Years	Two (2) Years
Speakers Defective Car Audio Speakers under war- ranty must be exchanged at the place of purchase. Contact your Dealer for details.	One (1) Year	Not Applicable
Accessories (in exchange for defective items)	Ninety (90) Days	Not Applicable

During the "Labor" warranty period, there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must carry in or mail in your product prepaid during the warranty period. If non-rechargeable batteries are included, they are not warranted. This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service.

CARRY-IN OR MAIL-IN SERVICE

For Carry-In or Mail-In Service in the United States, call 1-800-211-PANA (7262) or visit

Panasonic Web Site: http://www.panasonic.com

For assistance in Puerto Rico, call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

LIMITED WARRANTY LIMITS AND EXCLUSIONS

This warranty ONLY COVERS failures due to defects in materials and workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred during shipment, failures which are caused by products not supplied by the warrantor, failures which result from accident, misuse, abuse, neglect, bug infestation, mishandling, misapplication, alteration, faulty installation, set-up adjustment, maladjustment of consumer control, improper maintenance, improper voltage supply, lightning, modification, commercial use (such as use in hotels, offices, restaurants, or other business uses) or rental use of the product, or service by anyone other than the technician from Factory Servicenter or other authorized service centers, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIM-ITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRAN-TY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the servicer, and loss of media, data or other memory contents. The items listed are not exclusive, but are for illustration only.) ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to warrantor's Consumer Affairs Department at the addresses of the warrantor.

PARTS AND SERVICE WHICH ARE NOT COVERED BY THIS LIMITED WAR-Ranty are your responsibility.

Customer's Record Model No. Serial No. Dealer's No. Code No. Dealer's Address Date of Purchase

CANADA

Panasonic Canada Inc.

5770 Ambler Drive, Mississauga Ontario L4W 2T3

PANASONIC PRODUCT LIMITED WARRANTY

Panasonic Canada Inc. warrants this product to be free from defects in materials and workmanship and agrees to remedy any such defect for a period as stated below from the date of original purchase.

CAR AUDIO PRODUCT - ONE (1) YEAR, PARTS AND LABOUR

(The labour to install or remove the product is not warranted) ACCESSORIES - NINETY (90) DAYS, (IN EXCHANGE FOR DEFECTIVE ITEMS)

LIMITATIONS AND EXCLUSIONS

This warranty does not apply to products purchased outside Canada or to any product which has been improperly installed, subjected to usage for which the product was not designed, misused or abused, damaged during shipping, or which has been altered or repaired in any way that affects the reliability or detracts from the performance, nor does it cover any product which is used commercially. Dry cell batteries are also excluded from coverage under this warranty.

This warranty is extended to the original end user purchaser only. A purchase receipt or other proof of the original purchase date is required before warranty service is performed.

THIS EXPRESS, LIMITED WARRANTY IS IN LIEU OF ALL OTHER WAR-RANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL PANASONIC CANADA INC. BE LIABLE FOR ANY SPE-CIAL, INDIRECT OR CONSEQUENTIAL DAMAGES.

In certain instances, some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or the exclusion of implied warranties, so the above limitations and exclusions may not be applicable.

Features

Panasonic welcomes you to our constantly growing family of electronic products owners.

We endeavor to give you the advantages of precise electronic and mechanical engineering, manufactured with carefully selected components, and assembled by people who are proud of the reputation their work has built for our company. We know this product will bring you many hours of enjoyment, and after you discover the quality, value and reliability we have built into it, you too will be proud to be a member of our family.

Please refer to the separate "System Upgrade Guidebook" for how to operate this unit when optional devices are connected.

- No device is connected to this unit. → Basic operations are covered only by this book.
- Optional devices are connected to this unit. → Refer to the "System Upgrade Guidebook" in addition.

Simultaneous Multi-Device Connection (with Expansion Module (hub unit))

You can connect the optional Expansion Module (hub unit) (CY-EM100U). Connection of the Expansion Module allows you to simultaneously connect optional devices mentioned before as well as other AV devices. For details, refer to the operating instructions for the Expansion Module.

Connectable devices

- CD/DVD changer (max. 1)
- iPod® (max. 2)
- XM Satellite Radio (max. 1)
- Sirius Satellite Radio (max. 1)
- Hands Free Kit with Audio Streaming featuring *Bluetooth*[®] technology (Bluetooth unit) (max. 1)
- TV tuner (max. 1)

Note:

- Market conditions regarding optional devices vary with countries and regions. For further information, consult your dealer.
- If a non-Panasonic product is connected to this unit, we do not guarantee the operations of the product.

Integration of the monitor, FM/AM radio, DVD Video/Video CD player and CD/MP3/DivX player

Built-in AV Input/Output Terminals For more convenient connection and setup, all terminals are now provided on the unit itself.

Note:

• If a non-Panasonic product is connected to this unit, we do not guarantee the operations of the product.

SQ (Sound Quality)

You have 6 preset modes (Flat, Rock, Pop, Vocal, Jazz, Club). You can customize your setting for these (except Flat) and save them for instant recall.

SQ3 (3-Band Sound Quality)

Center frequency and level are adjustable in each of 3 bands. This lets you fine-tune sound quality for each genre to suit car-interior acoustics and your personal preferences. (→ page 35)

GUI (Graphic User Interface)

GUI displays various indications with colorful symbols to enhance visibility, enjoyment, and operability.

Disc type auto-detection

The signal auto-detection function of this unit allows users to be free from selection between PAL and NTSC before use of your discs. (For output signal, set <u>TV Type</u>. (→ page 36))

Touch Panel Operation

Simply touch the screen lightly to operate virtually all functions. Easy-to-use menus and icons let you "touch and choose" what you want, so you can start using your system from the very first day. That also means that while you drive, you can concentrate on the road.

DVD-R, DVD-RW Playback

(⇒ page 18, 44 for details)

ID code

4-digit ID code for increased security.

Fill in the ID code memo (\Rightarrow page 42).

Contents

English	2
Français	48
Español	94

□ Safety Information	2
Notes on Use	
Components	
Customer Services Directory	
Limited Warranty Features	
	0
Preparation	10
First time power on, other settings, symbols used in	this manual
□ Name of Controls and Functions	
Anti-Theft System	
Touch Panel Operation Overview	14
Power on/power off, display open/close, sou	
selection, volume, mute, tilt angle, folding de display temporarily	own the
Before Disc Playback	18
Disc Player	20
□ Notes on MP3/DivX	
☐ Radio	
□ AV1/AV2	
	-
Settings	30
Setup operation	
Basic setting, screen, sound, disc, radio	
About DivX VOD Content	
Troubleshooting	
Maintenance	
□ Notes on Discs	
Language Code List Definition of Terms	
Definition of Terms Specifications	

Preparation

First Time Power On

When the power of this unit is turned on for the first time, the following screen appears. Perform the settings in accordance with the specifications of the car on which this unit is mounted.

Expla	nation	of AG	C SELE	ст	
For a	n Acc-			, selec	+ 0.1
FOT a	n Acc-	equipi	sea car	, selec	ι ΟN.
Which	000 4	o	prefer	? On	Off
WILLON	une u	o you	breiei		

On Off : sets to ON if your car has ACC position.

: sets to OFF if your car has no ACC position.

default: On

Note:

- For an ACC-equipped car, select ON. The following functions are available.
 - The power is turned on automatically when inserting a disc or magazine.
 - Off selection disables turning on the power of the main unit through the remote control.

\land Caution

• Be sure to select off when your car has no ACC position in the ignition switch. Failure to do this could cause the battery to go dead.

OFF



ACC

Other Settings

Please refer to the separate "System Upgrade Guidebook" for how to operate this unit when optional devices are connected.

Basic set	ting	(basic settings) (⇒ page 32)
clock, ID co	de, inp	out, memory clear, other
Screen	(scre	en settings) (➡ page 34)

dimmer, display, aspect

Sound (sound settings) (→ page 35)

SQ3, bass/treble, balance/fader, sub-woofer

Disc (disc settings) (→ page 36)

audio language, subtitle language, menu language, video setting, audio setting, Divx registration

Radio (radio settings) (→ page 37) FM setup

Note:

 Refer to "Settings" (→ page 30) for further information about operations, settings, and others of the menu screen.

You may need to set the following depending on the devices to be connected.

Subwoofer

Execute Sub-Woofer (sub-woofer adjustment).
 (⇒ page 35)

AV1/AV2 (Camcorder, VCR, etc.)

• Adjust Input. (> page 33)

A Warning

 When you connect external devices to this unit, be sure to connect the side brake connection lead (
Installation Instructions).

Symbols used in this manual

Pictographs

You can perform some operations of this unit in one or more methods with the touch panel or remote control. This book explains such operations in tabular form as follows. Refer to the following for the pictographs located in the upper part of each table.



Compatible types of disc

The discs compatible with the targeted operation.



Operation on the Touch Panel

You can use the touch panel to perform the targeted operation. If the operation is not executable with the touch panel, "—" is displayed.



Operation on the Main Unit

You can use the Main Unit to perform the targeted operation. If the operation is not executable with the Main Unit, "—" is displayed.

Disc Marks

The following pictographs are used for the descriptions of disc operation. (\Rightarrow page 19-23)

DVD : DVD

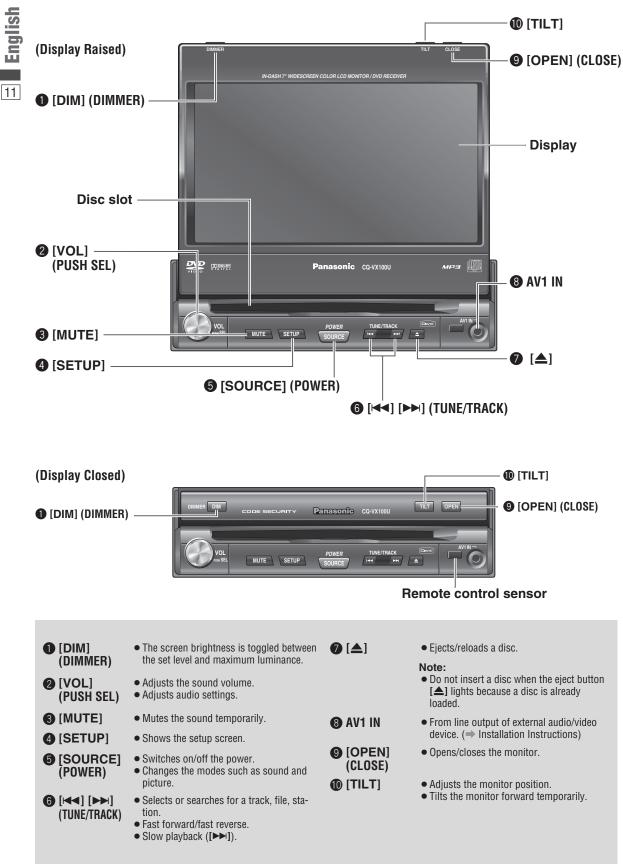
VCD : VCD (Video CD)

CD : CD

MP3 : CD-Rs/RWs containing MP3 files

DivX : CD-Rs/RWs or DVD-Rs/RWs containing DivX files

Name of Controls and Functions



Anti-Theft System

This unit is equipped with a removable face plate. Removing this face plate makes the unit totally inoperable.

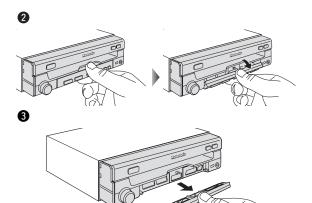


12 English

Removable face plate

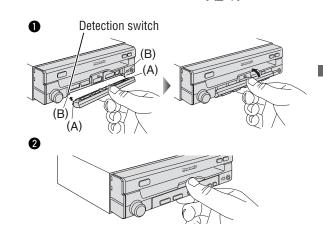
Remove the Face Plate

- Switch off the power of the unit.
- Hold the top and bottom of the center part of the face plate and pull it down toward you.
- **3** Pull the face plate toward you.
- Place the face plate into the case and take it with you when you leave the car.



Install the Face Plate

- Engage the right and left concave parts (A) on the lower rear side of the face plate with the convex parts (B) of the main unit.
- Raise and press the face plate toward the main unit until a click is heard while engaging (A) with (B).



Face Plate Removal Alarm

This alarm sounds to warn you not to forget to remove the face plate before leaving your car.

This function is activated when Security Alarm is set to On). (\Rightarrow page 33)

≜Caution

- Be sure to follow the procedure mentioned above to mount the face plate appropriately. Improper mounting such as forcible mounting without engaging the concave parts with the convex parts may cause trouble.
- Use caution not to damage the detection switch while mounting the face plate. Failure to observe this may cause trouble.
- Use caution not to apply excessive force to the removed face plate when the plate is carried or stored. Failure to observe this may cause trouble.
- This face plate is not waterproof. Do not expose it to water or excessive moisture.
- Do not remove the face plate while driving your car.
- Do not place the face plate on the dashboard or nearby areas where the temperature rises high.

Touch Panel Operation Overview

13

\Box Notes on the Touch Panel

Before operation

• Clean the surface of the touch panel. (→ page 43) **Operation**

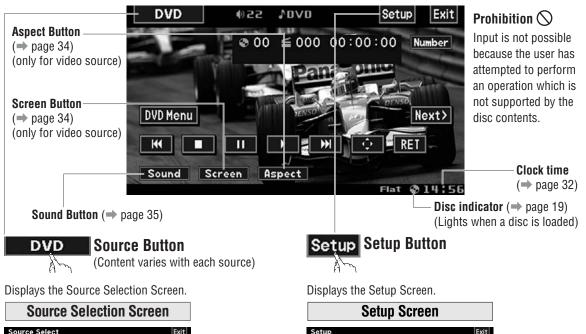
- Use only your fingers to operate the touch panel.
- Do not press the panel forcefully.
- Do not scratch the panel with fingernails or any hard objects.
- Do not use a pen or other sharp implements to operate the touch panel.
- Do not bump the front panel.
 Failure to observe the above may damage or break the glass on the surface of the touch panel.

The State of Operation Screen

Example: DVD mode

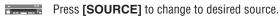
Note:

- The following picture is partly darkened for explanation.
- Displaying contents and their positions partly vary with each mode. Refer to the description of each mode for details.





Source Selection Screen appears. Touch desired source button. Touch Exit to quit.



Note:

• The screen above appears when no external device is connected to this unit.

S	etup Scree	en
Setup	2.0 F2	Exit
Basic Setting	Screen	Sound
Disc	Radio	
		@14:56

Setup Screen appears. Select desired setting. **Setup menu, (→ page 30)**

Press [SETUP] to let Setup Screen appear.

Switching the Display

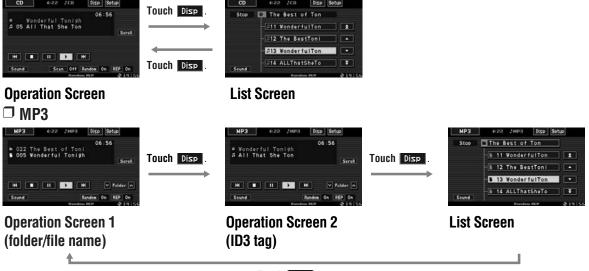
Please refer to the separate "System Upgrade Guidebook" for how to operate this unit when optional devices are connected.

Note:

- Refer to the instructions of each source.
- To switch Operation Screen on, touch the center of touch panel. (Touch Exit to cancel)
- If no operation takes place for more than 10 seconds when Operation Screen is ON, Operation Screen is turned off.

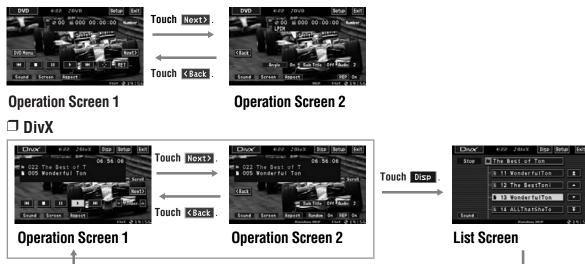
Audio Source

🗆 CD



Touch Disp .

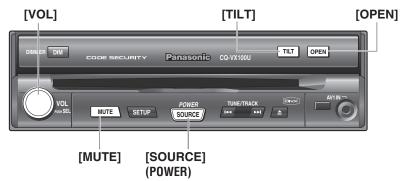
Video Source



Touch Disp .

English

General



Preparation: Turn your car's ignition key to the ACC or ON position.

General Operation	S				
Operations					
Power ON :	-	[SOURCE]			
Power OFF :	-	([SOURCE])			
Display Open/Close	_	[OPEN]	 Press once 	to open. Press again to	close.
	 If the unit st 	ops halfway, pre	ss [OPEN] aga	d beep sounds three time iin to draw it all the way en the power is off.	
Source selection	(⇒ page 14)	[SOURCE]			
Note: ● The sources AV1 and			RADIO	(AM/FM)	(→ page 26)
AV2 provide the audio and video from the		DVD	(DVD/VCD (Vide	eo CD)/CD/MP3/DivX)	(⇒ page 20)
devices connected to AV1 IN and AV2 IN of			A	/1	(→ page 28)
this unit respectively,				7	
and the source Ext. In provides the audio and			A\	/2	_ (⇒ page 28)
video from the device connected to EXT VIDEO IN of this unit via the expansion module (CY-EM100U, option). • If there is no external sources connected.		to the Ex Module (CY-EM1 When the Module (option) is (→ Syste	00U) e Expansion CY-EM100U, s connected. em Upgrade	Ext. In HUB1 HUB2 HUB2 HUB3	(→ System Upgrade Guidebook)
AV1/AV2 mode can be set to skip. (> page 33)		Guideboo)k) 	HUB4	

(Touch/Press and hold for more than 2 seconds

General Operation	s (continu	ed)		Enalish	
Operations		• ••		Enc	
Volume Note: ● The sound level for	-		UpDown	10	
each source is stored in memory.		Setting range: 0 to 40, default: 18 Note: • The volume level can be set independently for each source and each disc format.			
Mute	_	[MUTE]	Mutes the sound. To cancel, press again.		
Tilt Angle	-	([TILT])	Press and hold for more than 2 seconds.		
	or	-	Touch to adjust. Setting range: 1 to 5 default: 5		
	Auto	-	the monitor is opened automatically when turning ON ACC.		
	Manual	-	the monitor is not opened automatically. default: Manual		
1 5	eign objec Note: • Vertical ang	uch the unit while tts into the unit c le (TILT) is saved	e the display is moving. Inserting hands, fingers or for- an cause injuries and damage to the unit.		
	 is automatically set at the angle and in the position adjusted before. After adjusting its angle, also adjust the brightness as well. (→ page 34) The car model and installation conditions may impose some restrictions on the adjustment of the monitor's angle. 				
Folding Down the Display Temporarily	-	[TILT]	To raise the display, press again.		
	• Even when the unit power is off, you can fold down the display temporarily.				
	 Caution Avoid physical shock to the monitor. Do not place any object on the display, or subject it to undue force. Do not move the display forcibly. The monitor movable range may be limited by the type of car, the position where the display is mounted, etc. 				

Before Disc Playback

Discs that can be Played Back

🗖 Disc Type

DISC	DVD	VCD (Video CD)	CD	CD-R/RW
Mark/logo		COMPACT METAL VDED COMPACT COM		
Disc Size		12 cm		
Video Format	NTSC / PAL			
Audio Format	LPCM, MPEG1, MPEG2, Dolby Digital	LPCM (CD-DA*1), MPEG1, MPEG2 (SVCD)	LPCM (CD-DA*1), MP3	
Region No.	1, ALL*2			

*1 CD-DA : A general music CD format.

Note:

- Only discs with logos shown in the "Mark/logo" row of the table above are playable.
- About CD-Rs and CD-RWs, refer to "Notes on CD-Rs/RWs, DVD-Rs/RWs". (→ page 44)
- Some copy-protected music CDs are not playable.
- Even if you play a dts DVD or a dts CD, analog sound cannot be reproduced.

Notes on DVD-Rs/RWs

- Do not mix DVD-Video formatted data and other formatted data on the same disc.
- Discs in the video recording (VR) format are unplayable.
- Unfinalized discs are unplayable.
- Use disc-at-once recording for DVD-R DL (double-layer).
- Some discs are unplayable depending on the disc itself, device, drive and software that are used for disc recording.

🗇 Discs not supported

The following discs are not played back on this product.

- DVD-Audio
- DVD-ROM
 DVD+RW

CVD

- DVD+R
- VSD
 CD-G
- CD-ROM (except MP3)
- CD-RW (except MP3/DivX and CD-DA)
- CD-R (except MP3/DivX and CD-DA)
- SACD
 Photo CD
- Hybrid SACD (except CD-DA)
- CD-EXTRA (audio-only playback possible)
- DVDs with a region number other than "1", or "ALL"*2
- Playing back a photo CD disc with this unit could damage the data that is recorded on the disc.

🗇 About DivX

 DivX files recorded on CD-Rs/RWs and DVD-Rs/RWs are playable. Refer to "Notes on MP3/DivX" for further information. (→ page 24)

\Box Symbols used on jackets

(Examples of such symbols include)

- .2. : Number of subtitle languages
- 2)) : Number of audio tracks
- \bigcup_{3} : Number of angles

The numbers indicate the number of languages, tracks, angles, etc., recorded on the disc.

Screen size (H:V aspect ratio)

- 4:3 : 4:3 standard size
- LB : Letterbox (→ page 36)
- 16:9 wide size

16:9 LB : Playback in letterbox format on a standard screen (4:3).

16:9 PS : Playback in Pan & Scan (pan and scan) (→ page 36) format on a standard screen (4:3).

Note:

 The size of the image that is displayed on the screen depends on the screen mode (<u>Aspect</u> → page 34), and on the screen size for the content on the disc.

Region Management Information

This product is designed and manufactured to respond to the Region Management Information that is recorded on a DVD disc. If the Region number described on the DVD disc does not correspond to the Region number of this product, this product does not play the disc.

*²The Region number for this product is "1" or "ALL".

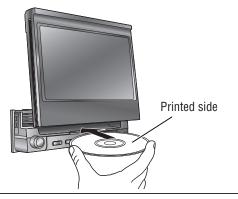
Example:



17

DVD-RAM

CDV



\land Caution

• When the disc is inserted or ejected, to prevent disc scratches never exert any downward force on the disc.

Disc Insert DVD VCD CD MP3 DivX

• The mode that supports the disc is selected, and playback starts.

- DVD VCD

- The audio format is automatically identified.
 (⇒ page 18)
- When the menu screen appears, see "Chapter/title Selection" on page 22.

When a disc is in the player, change to disc player mode (CD, MP3, DivX, DVD or VCD (Video CD)) and playback starts.

Note:

- Do not insert a disc when the eject button (=) lights because a disc is already loaded.
- The power will be turned on automatically when a disc is loaded.
- You can play a disc even if the monitor is closed.

- DVD VCD

• The sound may be interrupted for a few moments while the audio format is being identified.

\land Caution

- Do not use irregularly shaped discs.
- Do not insert foreign object into the disc slot.
- This unit does not support 8-cm disc. In case of load such a disc, eject and remove the disc from the slot immediately.

When a disc is in the player...



Do not insert a disc when the eject button () lights because a disc is already loaded.

Disc Eject DVD VCD CD MP3 DivX

Press [**▲**] to stop playback and eject the disc. (Press [**▲**] again to reload the disc.)

Note:

• If you leave a disc in the slot for more than 30 seconds after its ejection, the disc will be automatically reloaded after loud beep is energized three times.

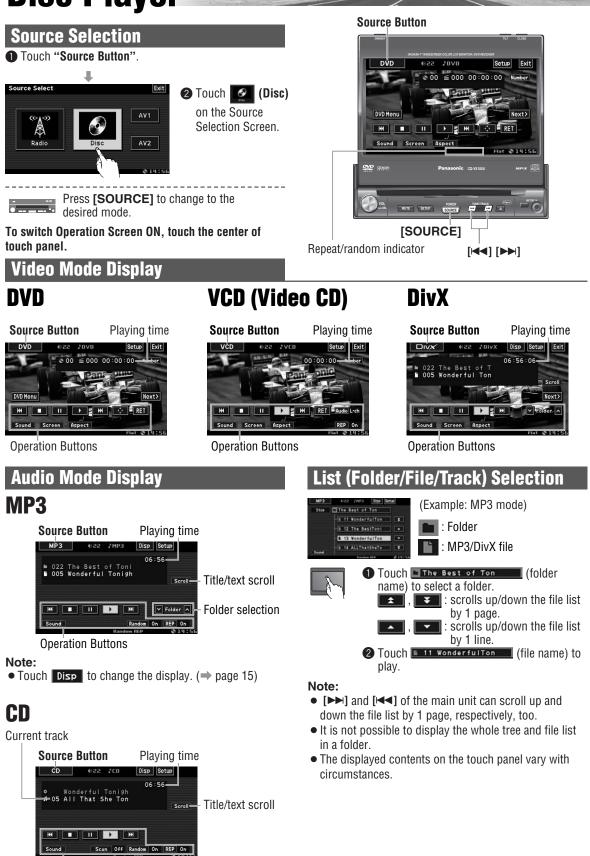
DVD VCD

- Due to limitations of certain discs, some DVD and VCD (Video CD) discs may not operate as described in this manual. Refer to the disc jacket for further details.
- This unit does not support DVD and VCD (Video CD) karaoke functions.

Disc Player

English

19



Operation Buttons

-
5
5

20

Basic Operations				Operations	
Onenting	Compatible			Operations	
Operations	Discs	- Ann	• • • • • •		
Track/file Selection	DVD VCD	₩	[▶▶]	Next track/file	
	CD MP3 DivX	K	[₩4]	Beginning of the current track/file Previous track/file (Touch/press twice.)	
	DVD	 When play 	 Note: When playing a DVD, there are cases where it is not possible to return the start of a chapter that spans 2 titles. 		
Fast Forward/	DVD VCD	×	[▶▶]	Fast forward	
Fast Reverse	CD			Release to resume playback. Fast reverse	
	MP3 DivX	ز لیکی)	·/	Release to resume playback.	
	OVD VCD Divx		The speeds of fast forward and fast reverse change incrementally in 4 step every time the corresponding button is pressed.		
Folder Selection	MP3 DivX	^	_	Next folder	
	MP3 DIVX	>	_	Previous folder	
Title/text Scroll	CD MP3 Divx	Scroll	-	Scrolls the title/text once	
Stop	DVD VCD				
	CD MP3 DivX		-	To resume playback, touch 💌.	
Pause	DVD VCD				
	CD		-	To resume playback, touch again or touch 🕨	
Slow Playback	MP3 DivX			 Touch/press and hold in the pause mode. 	
olon i laybaok	DVD VCD	X		Playback is at about 1/3 normal speed. To resume normal playback, touch P .	
	DivX	Note:			
	DVD VCD	Reverse	slow playbac	k is not possible.	
Repeat Play	CD CD	REP *	-	To cancel, touch again.	
	MP3 DivX				
Repeat Play within the Current Folder	MP3 DivX	(REP)*	_	To cancel, touch and hold for more than 2 sec- onds again.	
Scan Play	CD	Scan	_	To cancel, touch again.	
Random Play	CD MP3 DivX	* Random	_	To cancel, touch again.	
Random Play within the Current Folder	MP3 DivX	* Random) –	To cancel, touch and hold again.	

* Touch panel symbols will change to indicate these current mode. Random Folder, REP Folder

Disc Player (continued)

English

21

To switch Operation Screen ON, touch the center of touch panel.

Chapter/title Sele	ction			
				Operations
Operations	Compatible Discs			
Showing menu and selecting an item *1 Note on VCD: For VCD, touch RET instead of DVDHenu .	DUD VED *1	DVD Menu Or RET *1 • • • • • • • • • • • •	_	 Menu appears. Select the desired item. (Touch when the direction buttons shown at left are not displayed.). Determine the setting.
	DVD	Move	-	Toggles the position of the buttons on the screen between upper and lower.
		Enter	-	Returns to the previous display.
Starting Playback from a specific chapter/title		Number	_	Toggles "Chapter number input mode", "Title number input mode" and "Number input mode".
Touch the numerical key to enter a number directly	DVD	to 9	-	Input desired number.
EV0 +.22 210/0 Brain Ext 1 2.2 2.42 5.40 Ext Ext 1 2.2 2.42 5.40 Ext Ext		Enter Note:	-	Playback starts.
Sound Reream Report		 For retryin 	g selection	during number entry, touch [Clear].

Note:

- If no operation is performed for 8 seconds after you have touched **Number**, the operation buttons disappear.
- If the title/chapter number is inputted and no operation is performed for 8 seconds, playback will start from the number of the title/chapter entered.

*2 On-Screen Direct Operation (Only for DVD)

Some DVDs allow you to operate the DVD menu by touching the screen.



DVD mode	display				
Chapter/title s Fast forward/f					
		h Next>.	DVD 4:22 2:010 Setue Setue S 00 0:00 0:00:00 0:00:00 0:00:00 LCH State title 0:00:00 0:00:00 0:00:00 KBack State title 0:00:00 0:00:00 0:00:00 State State title 0:00:00 0:00:00 0:00:00 State State title 0:00:00:00 0:00:00 0:00:00 State State title 0:00:00:00 0:00:00:00 0:00:00 State State title 0:00:00:00:00 0:00:00:00 0:00:00:00 State State title 0:00:00:00:00:00:00:00:00:00:00 0:00:00:00:00:00:00:00:00:00:00:00:00:0	-Repeat play	
Stop/pause	/play		Audio Language/		
DVD menu	Return		Angle/ Subtitle Language		

Useful Function				
	Compatible			Operations
Operations	Discs			
Subtitle Language		Sub Title Off	-	• Touch during playback.
	DVD DivX	lt is possible guages are re Note:		he subtitle language during play if multiple lan- he disc.
		 There may 	be a brief d	elay before the subtitles appear.
Audio Language	DVD	Audio 2	-	• Touch during playback.
	DivX	lt is possible guages are re		he audio language during play if multiple audio lan- he disc.
Angle		Angle 2	-	• Touch during playback.
	DVD	a number of o	different ang	scenes which have been shot simultaneously from les the same scene can be viewed from each of ring play. (<u>Angle Mark</u> → page 36)
Stereo & Monaural	VOD	Audio L-ch It is possible (L or R).	– to switch th	e audio between stereo sound and monaural sound
		ST L-cl	h: the l right h: the l	eo sound eft channel audio is output on both the left and t speakers. right channel audio is output on both the left and t speakers.

Note:

- If no operation is performed for 10 seconds or **Exit** is touched , the operation buttons disappear.
- It may not be possible to switch the language unless the unit is at the DVD menu (→ previous page) or is at the DVD settings. (→ page 36)
- The language on the DVD settings takes priority when the power is turned on or the disc is loaded.
- The number of languages and angles depend on the disc. Some discs have only one language/angle or have no language/angle.

English

Notes on MP3/DivX

What is MP3/DivX?

MP3*: MP3 (MPEG Audio Layer-3) is the compression format of digital audio. It is developed by MPEG (Motion Picture Experts Group). Using this compression format, you can record the contents of about 10 music CDs on a single CD (This figure refers to data recorded on a 650 MB CD-R or CD-RW at a fixed bit rate of 128 kbps and a sampling frequency of 44.1 kHz).

*MPEG Layer-3 audio coding technology licensed form Fraunhofer IIS and Thomson.

DivX: The video compression format developed by DivX, Inc. compresses video files without any considerable loss of video quality.

Note:

• MP3/DivX encoding and CD writing software programs are not supplied with this unit.

Points to remember when making MP3/DivX files

Common

- High bit rate and high sampling frequency are recommended for high quality sound.
- Selecting VBR (Variable Bit Rate) is not recommended because playing time is not displayed properly and sound may be skipped.
- The playback sound quality differs depending on the encoding circumstances. For details, refer to the instructions of your own encoding software and writing software.

MP3

 It is recommended to set the bit rate to "128 kbps or more" and "fixed".

DivX

- DivX files greater than 2 GB or having no index may not play properly on this unit.
- This unit supports all resolutions up to maximum of 720 x 480 (NTSC)/720 x 576 (PAL).
- You can select up to 8 types of audios and subtitles on this unit.
- GMC (Global Motion Compensation) is not supported.

≜Caution

• Put only ".mp3" files on an MP3-formatted disc. Put only ".DIVX", ".divx", ".AVI" and ".avi" files on an DivX-formatted disc. Otherwise, abnormal sound may be produced during play which can damage the speaker and your hearing.

Display Information (on the Main Unit)

Displayed items

- CD-TEXT Disc title Track title
- MP3/DivX Folder name File name

• MP3 (ID3 tag) Album name Title and artist name

Displayable characters

- Displayable length of file name/folder name: within 64 characters. (Unicoded file and folder names are reduced by half in the number of displayable characters.)
- Name files and folders in accordance with the standard of each file system. Refer to the instructions of writing software for details.
- ASCII character set can be displayed.
- Some Cyrillic characters in the Unicode can be displayed.

ASCII character set

```
A to Z, a to z, digits 0 to 9, and the following symbols:
(space) ! " # $ % & ' ( ) * + , - . / : ; < = > ? @ [ \ ] ^ ` { ! } ~
```

Note:

- With some software in which MP3/DivX format files have been encoded, the character information may not be displayed properly.
- Undisplayable characters and symbols will be converted into an asterisk (*).
- It is recommended that the length of the file name is less than 8 (excluding the file extension).

24

Recording MP3/DivX files on a CD/DVD-media

- It is recommended not to use a disc holding two or more different format types of files.
- If CD-DA files are on the same disc as MP3 or DivX files, the songs and the movies may not play in the intended order, or some songs or movies may not play at all.
- When storing MP3 data and DivX data on the same disc, use different folders for each data.
- Do not record files other than MP3/DivX files and unnecessary folder on a disc.
- The name of an MP3/DivX file should be added by rules as shown in the following descriptions and also comply with the rules of each file system.
- The file extension ".mp3" should be assigned to MP3 files.
- The file extension ".DIVX", ".divx", ".AVI" or ".avi" should be assigned to DivX files.

- You may encounter trouble in playing MP3/DivX files or displaying the information of MP3/DivX files recorded with certain writing software or CD/DVD recorders.
- This unit does not have a play list function.
- Although Multi-session recording is supported, the use of Disc-at-Once is recommended.

Supported file systems

ISO 9660 Level 1/Level 2, Apple Extension to ISO 9660, Joliet, Romeo

Note:

 Apple HFS, UDF 1.50, Mix CD and CD Extra are not supported.

Audio compression formats (Recommendation: "Points to remember when making MP3/DivX files" on the previous page)

Compression method	Bit rate	VBR	Sampling frequency
MPEG 1 audio layer 3 (MP3)	32 k – 320 kbps	Yes	32, 44.1, 48 kHz
MPEG 2 audio layer 3 (MP3)	8 k – 160 kbps	Yes	16, 22.05, 24 kHz
DivX data created using ver.3.11, 4.x, 5.x*	8 k – 320 kbps	Yes	8 k – 48 kHz

* DivX video system/MP2, MP3

Note:

• VBR is not recommended.

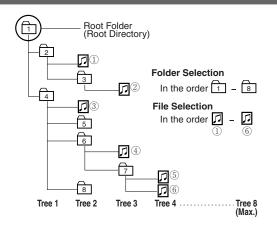
Folder selection order/file playback order

Maximum number of files/folders

- Maximum number of files: 999
- Maximum number of files in one folder: 999
- Maximum depth of trees: 8
- Maximum number of folders: 255 (Root folder is included.)

Note:

- You can shorten the duration between data read and playback by decreasing the quantity of files or folders, or the depth of the hierarchy.
- This unit counts the number of folders irrespective of the presence or absence of an MP3/DivX file.
- If the selected folder does not contain any MP3/DivX files, the nearest MP3/DivX files in the order of playback will be played.
- Playback order may be different from other MP3/DivX players even if the same disc is used.
- "ROOT" appears when displaying the root folder name.



Copyright

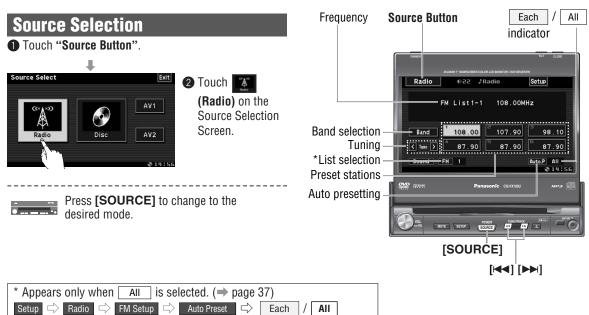
It is prohibited by copyright laws to copy, distribute and deliver copyrighted materials such as music without the approval of copyright holder except enjoying yourself personally.

No warranty

The above description complies with our investigations as of December 2007. It has no warranty for reproducibility and displayability of MP3/DivX.

Radio

English 52



Tuning			
Operations			
Band Selection	Band	_	
	Each FM	11 → FM :	2 → FM 3 → AM
	AII	M -	→ AM
List Selection		n: Select All . (
Refer to the next page.	Setup ⊏> Ra	dio 🖒 FM Setup	Auto Preset 🖒 Each / All
	FM 1	_	
	FM 1 (list 1)	→ FM 2 (list	2)]-> [FM 3 (list 3)]
	There are 6 sta list to another.		t. You can call up next 6 stations by switching from one
Station Selection	>	[▶▶]	Up
	<	[◄◀]	Down
Seek Tuning			Up
			Down
	Touch/press	and hold for mo	bre than 0.5 second then release. Seeking starts.

······ Touch/press and hold

Procot Momory			
Preset Memory	Select a band and frequency.		
Manual Preset Memory	FM List1-1		
Up to 6 stations can be preset in each band.	to - blinks once		
preset in each banu.	T 108.00		
	 Touch and hold for more than 2 seconds. The frequency blinks once, and a receiving station is saved in the memory. 		
Auto Brosot Momory	New stations overwrite existing saved stations.		
Auto Preset Memory	Preparation: Select Each Each (→ page 37) (default: Each) Setup ⇔ Radio ⇔ FM Setup ⇔ Auto Preset ⇔ Each / All		
Each	Select a band.		
Six stations are automati- cally preset in each band.	6 stations with first to 6th highest in signal		
	strength of each band will be preset.		
	• Touch and hold for more than 2 seconds.		
	• Once set, the preset stations are sequentially scanned for 5 seconds each. (scanning) New stations overwrite existing saved stations.		
	Preparation: Select All . (> page 37)		
In total 18 FM stations are automatically preset.	Setup 🖙 Radio 🖙 FM Setup 🖙 Auto Preset 🖙 Each / All		
	18 stations with first to 18th highest in signal		
	strength of all FMs will be preset at once.		
	 Touch and hold for more than 2 seconds. 		
	• Once set, the preset stations are sequentially scanned for 5 seconds each. (scanning)		
	New stations overwrite existing saved stations.		
Preset Station Calling	Select a band or a list.		
	to		
	¹⁵ 108.00		
	Touch desired preset button.		
Preset Swap	Preparation: Select All (→ page 37) Setup ⇔ Radio ⇔ FM Setup ⇔ Auto Preset ⇔ Each / All		
A station preset is inter-			
changeable with another	 Select the list and the preset number that contains the station to be interchanged (see "Preset station calling" above). Select the list and hold down the preset number that contains the targeted channel for more than 0 exceeded. 		
station preset.			
	for more than 2 seconds.		
	to _ The preset station selected in the step 1 is interchanged with the targeted preset chan-		
	nel selected in the step 2 (Preset Swap).		

AV1/AV2

27

Preparation:

Connect an optional external device to the AV1/AV2.

Source Selection

You can view the images and listen to the sounds from the connected external devices in the AV1/AV2 mode respectively.

Touch "Source Button".



2 Touch AVI / AV2 (AV1/AV2) on the Source Selection

Press [SOURCE] to change to the desired mode.

To switch Operation Screen ON, touch the center of touch panel.

Note:

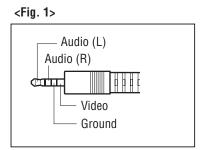
- You can set up the system so that the AV mode is not selected (source skip). (Input → page 33)
- If no operation is performed for 10 seconds or Exit is touched, the operation buttons disappear.
- Only the pin jack of the supplied Conversion Cable for AV 1 IN or a pin jack that has the same electrode arrangement can be connected to the AV 1 IN terminal. (See Fig. 1.)
- Use of the supplied Conversion Cable for AV 1 IN or an audio pin jack that has the same electrode arrangement also allows users to enjoy only music. In this case, the screen background becomes black.

Source Button



[SOURCE]

AV1 IN



English 58

Settings

ina	
.5	1
	i
	l

29

sh

Basic Setting

Clock
ID-Code
Input
Memory Clear
Other

Screen Dimmer Display Aspect

SQ3 Bass/Treble

Balance/Fader Sub-Woofer

Disc

Audio Language Subtitle Language Menu Language Video Setting Audio Setting DivX Registration

Radio

FM Setup XM Setup SIRIUS Setup

Basic Setting Clock setting (→ page 32) ID Code Setting (→ page 32) Input Selection (→ page 33) Memory clearance (→ page 33) Other settings (→ page 33) Screen Adjusting the brightness (→ page 34) Display appearance (⇒ page 34) Display aspect setting (→ page 34) Sound SQ3 setting (→ page 35) Bass/treble adjustment (→ page 35) Balance/fader adjustment (→ page 35) Subwoofer adjustment (→ page 35) Disc DVD Audio Language Setting (→ page 36) DVD Subtitle language setting (→ page 36) DVD Menu language setting (⇒ page 36) **DVD Video Setting** (→ page 36) **DVD** Audio Setting (→ page 37) **DivX Registration** (→ page 37) Radio Setting for FM stations (⇒ page 37) Setting for XM radio (*1) Setting for Sirius satellite radio (*1)

(*1) Please refer to the System Upgrade Guidebook.

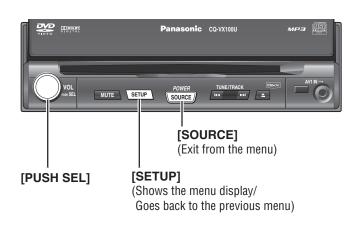
Setup Operation	
(Example: DVD mode)	
DVD ⊕22 ♪DVD Setup Exit	Setup
© 00 ≤ 000 00:00:00 Number	Basic Setting Screen Sound
DVD Menu K(II) A A A A A A A A A A A A A A A A A A	Disc Radio
Touch Setup in Operation Screen.	Touch desired setting.
(Example: setting screen of $\boxed{\text{Input}} \Rightarrow \text{page 33}$)	Back Determines the setting and goes back to the pre-
AV1 AV1 Skip	vious menu out of the menu.
AV2 AV2 NAV1 NAV2 NAV3 Skip	
CH-C Video Input On Off	
Camera BGC On Off	Exit Determines the setting and gets out of the menu.

Note:

• The display returns to the previous status if there is no operation for more than 60 seconds after changing to the setting menu.

@14:56

 The item may not be temporarily selected depending on the current disc type or the state of this unit. In such a case, change the source to another one and try to set up the item again.



[DIM] (DIMMER)

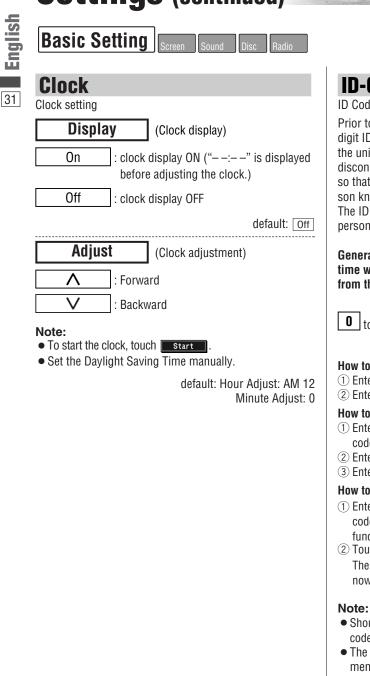
(The screen brightness is toggled between the set level and maximum luminance)



30

Settings (continued)





ID-Code

ID Code Setting

Prior to operating this unit, it is advisable to assign a 4digit ID code for security. Once the ID code has been set, the unit cannot be operated if the main power supply is disconnected then re-connected. It is electronically locked so that a thief cannot use the stolen unit unless that person knows the code you have set.

The ID code operation must be performed only by the person to whom the unit belongs.

Generally, it is not necessary to enter the ID code each time when using the unit if it has not been disconnected from the main power supply (car battery).



default: none

How to set your ID code (for the first time)

- 1) Enter an 4 digit ID code.
- (2) Enter the same 4 digit ID code again.

How to change your ID code

- 1) Enter the preset (old) 4 digit ID code. If the wrong ID code is entered, a new ID code cannot be registered.
- 2 Enter a new 4 digit ID code.
- ③ Enter the new 4 digit ID code again.

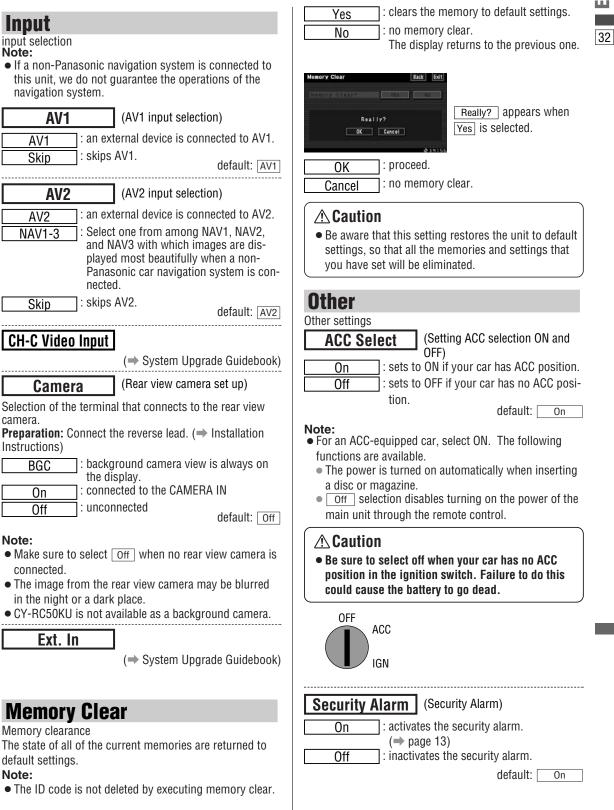
How to cancel the known ID code

- (1) Enter the preset (old) 4 digit ID code. If the wrong ID code is entered, it is not possible to cancel the ID code function.
- 2 Touch and hold **off** until "Completed!" is displayed. The ID code cancelling procedure is completed. The unit now works without an ID code.

- Should your unit ever require service, cancel your ID code before sending for repair.
- The ID code setting cannot be eliminated even by the memory clear function.
- The inputted code is not displayed for your security.

\land Caution

• Record your registered ID code and keep it in a secure location. (Fill in the ID code memo $(\Rightarrow$ page 42).) If you forget it, you will be unable to use the unit. In case you forget the ID code. please consult your nearest Panasonic Servicenter.



Settings (continued)



33

Screen (Display)

Note:

 The screen setting screen can be also activated by touching Screen when the button is displayed. $(\Rightarrow$ page 14)

Dimmer

Adjusting the brightness



Darker Brighter

default: [

Note:

• When [DIM] is pressed, the screen brightness is toggled between the set level that is adjusted by the procedure above and the maximum luminance.

Display

Display appearance

Contrast

(Adjust the image contrast)

: decreases the contrast between black and white.

: increases the contrast between black and white.

Bright

(Adjust the image brightness)

: darkens.

: lightens.

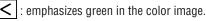


(Adjust the image color depth)

- < : lightens the depth of color on the display.
 - deepens the depth of color on the display.

Tint

(Adjust the image tone or tint)





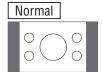
Note:

 When the video signal is PAL/SECAM format, adjustment cannot be performed.

> Setting range: -15 to +15 default: ±0

Aspect

Display aspect setting







 The screen is extended horizontally to the aspect ratio of 16 to 9.

• The conventional display image

vertical.

display.

to 9.

has a 4 to 3 ratio of horizontal to

 In this case, a blank area remains on the right and left sides of the

The screen is extended horizontally

The extension ratio is the same at

The screen is fully extended at the

normal aspect ratio of 4 to 3. • The top and bottom of the screen

any point of the screen.

are slightly cut.

as a whole to the aspect ratio of 16

 The extension ratio increases toward the right and left ends of the screen.

default: Normal

Note:

Just

- The aspect setting screen can be also activated by touching Aspect when the button is displayed. (⇒ page 14)
- This adjustment is common to video mode.
- You cannot change the aspect in the menu screen and a screen in the CD. MP3 and radio mode. These are fixed to "Full".
- When the rear view camera is in operation with the transmission gear shift in the reverse position, the image is shown on the "Full" screen only.
- In some cases, the picture looks different from the original one due to your selection of aspect.

\land Caution

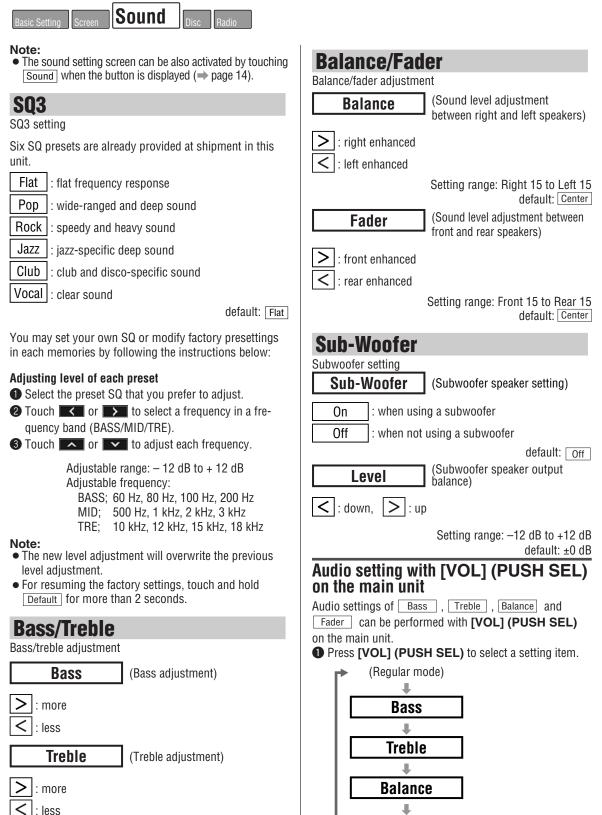
- This is to remind you that compression or extension of the screen using the aspect ratio (screen mode) changing function of this product for commercial purpose of profit making or viewing/listening by the public could infringe on the rights of the author protected by the copyright law.
- If you expand normal picture (4 to 3) by using "Just", "Zoom" or "Full" aspect to the full of the screen, you might not see the periphery of the picture, or you might see a distorted picture. Therefore, use the "Normal" mode to see the original picture as the author intended it.







34



Setting range: -12 dB to +12 dB default: ±0 dB Fader

2 Rotate [VOL] to make an adjustment.

Settings (continued)

35

Disc

Audio Language

DVD audio language setting

Note:

Other

Basic Setting

 These adjustments being executed, playback will start from the beginning of a disc.

English	: English
Français	: French

nçais	: Frei	nch
	-	

Español : Spanish

: other language. Input the language code. (⇒ page 45)

default: English

Subtitle Language

DVD subtitle language setting

Note:

- A disc supporting closed captioning and subtitles may overlap each other on the screen. In this case, turn the subtitle off.
- English : English
- Francais : French

Other

- Español : Spanish
 - : other language. Input the language code. (⇒ page 45)

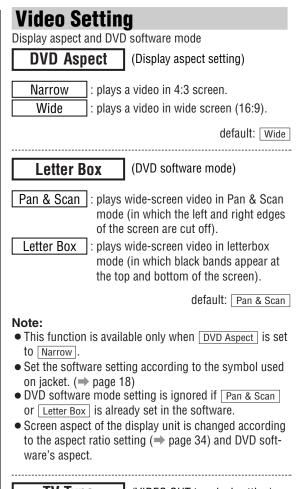
default: English

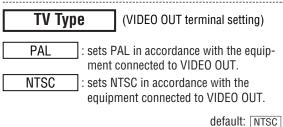
Menu Language

DVD menu language setting

- English : English Français : French
- Español : Spanish
 - Other : other language. Input the language code. (⇒ page 45)

default: English





Angle Mark

(Angle mark setting)

The angle mark is displayed to indicate the parts where multi-angle data is recorded.

On Off

: activates angle mark. : inactivates angle mark.

default: On

English Radio **FM Setup Audio Setting** Setting for FM stations Audio setting at DVD playing 36 Down Mix (Down mix setting) Auto Preset (Auto preset setting) Lt/Rt : surround element decodable down mix Each : saves the preset stations in each band. (Lt = Left total, Rt = Right total) All : saves the preset stations in all FM lists Lo/Ro : simple stereo down mix regardless of band. (Lo = Left only, Ro = Right only) default: Each Note: **XM Setup** • This function is available only when "Dolby Digital" source is playing. (→ System Upgrade Guidebook) default: Lt/Rt **SIRIUS Setup** (→ System Upgrade Guidebook) DR COMP (Dynamic Range Compression setting) STD : DR COMP ON MIN : made with the greatest compression, roughly equivalent to a TV broadcast. 0ff : DR COMP OFF Note: • This function is available only when "Dolby Digital" source is playing. default: Off **DivX Registration** Show the DivX Registration Code (\Rightarrow page 38) Back Exit DivX(R) Video On Demand Your registration code is: ****** To learn more visit www.divx.com/vod

About DivX VOD Content

DivX Video-on-Demand (VOD) content is encrypted for copyright protection. In order to play DivX VOD content on this unit, you first need to register the unit.

Follow the on line instructions for purchasing DivX VOD content to enter the unit's registration code and register the unit. For more information about DivX VOD, visit www.divx.com/vod.

Display the unit's registration code ____

1) Touch Setup .

- 2 Touch Disc .
- 2 Touch DivX Registration .



8 alphanumeric characters

Note:

- We recommend that you make a note of this code for future reference.
- After playing DivX VOD content for the first time, another registration code is then displayed in "DivX Registration". Do not use this registration code to purchase DivX VOD content. If you use this code to purchase DivX VOD content, and then play the content on this unit, you will no longer be able to play any content that you purchased using the previous code.
- If you purchase DivX VOD content using a registration code different from this unit's code, you will not be able to play this content. ("Authorization Error" is displayed.)

Regarding DivX content that can only be played a set number of times

Some DivX VOD content can only be played a set number of times. When you play this content, the remaining number of plays is displayed. You cannot play this content when the number of remaining plays is zero.

("Rental Expired" is displayed.) When playing this content

- The number of remaining plays is reduced by one if
 - you press [SOURCE].
 - you press [I◄] / [►►] (◄◄ / ►►) etc. and arrive at another content or the start of the content being played.

38

Troubleshooting

If You Suspect Something Wrong

Check and take steps as described below.

If the described suggestions do not solve the problem, it is recommended to take the unit to your nearest authorized Panasonic Servicenter. The product should be serviced only by qualified personnel. Please refer checking and repair to professionals. Panasonic shall not be liable for any accidents arising out of neglect of checking the unit or your own repair after your checking. **Never take measures especially those other than indicated by** *italic* letters in "Possible Solution" described below because those are too dangerous for users to handle themselves.

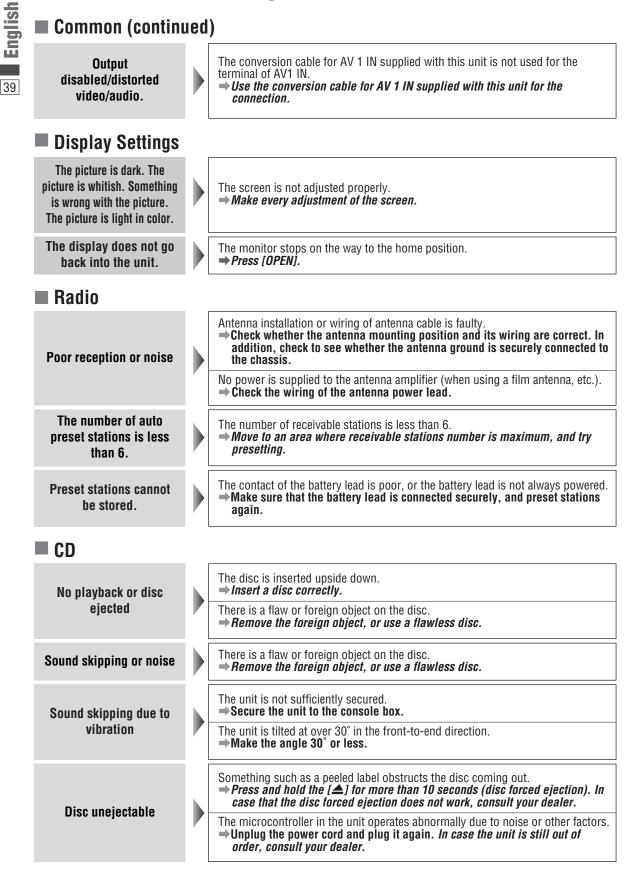
A Warning

- Do not use the unit in an irregular condition, for example, without sound, or with smoke or a foul smell, which can cause ignition or electric shock. Immediately stop using the unit and consult your dealer.
- Never try to repair the unit by yourself because it is dangerous to do so.

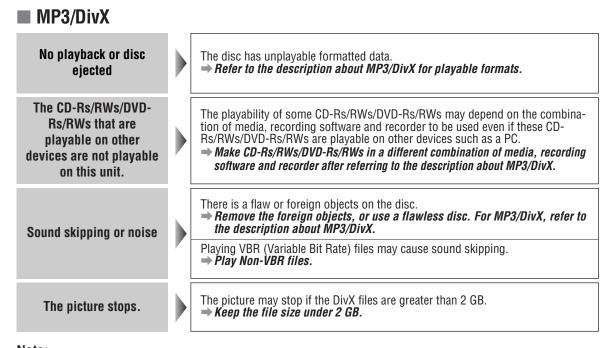
Common

Problem		Possible cause Possible solution	
No power to the unit		The power cord (battery, power and ground) is connected in the wrong way. → Check the wiring. Fuse blows out. → Eliminate the cause of fuse blowout and replace the fuse with new one. <i>Consult your dealer.</i>	
Sound is not generated.		MUTE is set to ON. → Set MUTE to OFF. The wiring of speaker lines is not correct, or a break or poor contact arises. → Check the wiring in accordance with the wiring diagram. (Installation Instructions)	
Noise		 There is an electromagnetic-wave generator such as a cellular phone near the unit or its electrical lines. → Keep the electromagnetic-wave generator such as a cellular phone away from the unit and the wiring of the unit. In case noise cannot be eliminated due to the wiring harness of the car, consult your dealer. 	
		The contact of the ground lead is poor. → Make sure that the ground lead is connected to an unpainted part of the chassis securely.	
Noise is made in step with engine revolutions.		Alternator noise comes from the car. → Change the wiring position of the ground lead. → Mount a noise filter.	
Some operations are not executable.		Some operations are not executable in particular modes such as menu mode. → Read the operating instructions carefully and cancel the mode. If the unit is still out of order, consult your dealer.	
No sound from speaker(s)		There is a break, a short circuit, poor contact or wrong wiring regarding the speaker wiring. → Check the speaker wiring.	
The speaker channels are reversed between right and left.		The speaker wiring is reversed between right and left. →Perform the speaker wiring in accordance with the wiring diagram.	
The power of the unit fails unintentionally.		The safety device works. → <i>Consult your dealer, or your nearest Panasonic Servicenter.</i>	

Troubleshooting (continued)



40



Note:

● Refer to "Notes on MP3/DivX". (→ page 24)

DVD

Cannot switch the audio language/subtitle language/angle.		 It is not possible to switch if the disc does not have multiple audio languages/subtitle languages/angles recorded on it. (Refer to the guide provid- ed with your disc.) Some discs permit switching through a menu screen. Sometimes, switching angles is possible only with certain scenes. 	
The audio/subtitle language selected in the DVD settings is not used.		If audio or subtitles in that language are not recorded on the disc, the audio or subtitles do not switch to that language. (Some discs permit switching through a menu screen. Refer to the guide provided with your disc.)	
A DVD-R or DVD-RW is		The disc is still unfinalized. → Finalize the disc. Refer to "Before Disc Playback" (→ page 18) or "Notes on Discs" (→ page 44) for other cases.	
not playable.		The disc is in the video recording (VR) format. → Play video formatted discs. Refer to "Before Disc Playback" (→ page 18) or "Notes on Discs" (→ page 44) for other cases.	
Sound is not generated.		The audio format is output disabled for this unit such as dts. → Use output enabled discs. Refer to "Before Disc Playback" (→ page 18) or "Notes on Discs" (→ page 44) for other cases.	

Troubleshooting (continued)

🗆 Error Display Messages

CD/MP3/DivX/DVD/VCD (Video CD)

Display	(Possible cause -> Possible solution	
Non Playable Disc		Disc is dirty, or is upside down. → Check disc. Disc has scratches. → Check disc.	
Mechanism error		No operation by some cause. ⇒Press [▲]. If failure persists, press the reset switch. If normal operation is not restored, call the store where you purchased the unit or the nearest Panasonic Servicenter.	
File error		The type of the file that is selected is not supported. → Check disc.	
No Disc		No disc is in the player. → Insert disc into the disc slot.	
Region Code error		The region code of the disc to be used is not compatible with this unit. → Press [▲] and check the disc.	
Continue Step ↓ 19:56		You are trying to play the DivX VOD content that was purchased with a different registration code. → Purchase the DivX VOD content with the registration code of this unit. (→ page 38)	
Continue Stop		The DivX VOD content has no available play count. → <i>Purchase again the content or play another content.</i> (→ page 38)	
DivX HD not supported		The selected DivX HD file is not supported. → Check the file. Play Non-DivX HD files.	

Note:

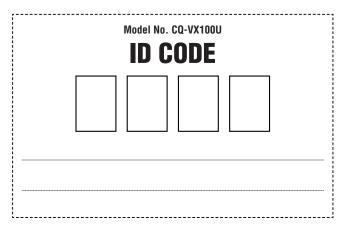
• There may be cases when the disc numbers affected by an error are displayed before "Non Playable Disc".



your nearest Panasonic Servicenter.

ID code memo

Copy the memo at right, fill in the ID code, and keep it in a secure location.



Product Servicing

If the suggestions in the charts do not solve the problem, we recommend that you take it to your nearest authorized Panasonic Servicenter. The product should be serviced only by a qualified technician.

Replacing the Fuse

Use fuses of the same specified rating (**15 A**). Using different substitutes or fuses with higher rating, or connecting the product directly without a fuse, could cause fire or damage to this unit.

If the replacement fuse fails, contact your nearest Panasonic Servicenter for service.

□ If the Unit Begins to Malfunction...

Reset switch

Remove the face plate (\Rightarrow page 13) and insert a hard, slender stick into the hole and push the switch.

Important

Push the switch only when the unit fails to operate with any buttons. (Stored settings and adjustments are not cleared.)

If the unit fails to return to normal condition, call the nearest Panasonic Servicenter and ask for repairs.



Reset switch

Note:

• If the ID-CODE has been already set, you will be asked to enter the ID-CODE right after the unit is restarted.

Maintenance

\Box Cleaning this Unit

Your product is designed and manufactured to ensure a minimum of maintenance. Use a dry soft cloth for routine exterior cleaning. Never use benzine, thinner or other solvents.



To remove stubborn stains

with a dry cloth.

- Moisten the soft cloth in dishwashing soap diluted with water and wring well.
 Wipe lightly. Go over the same surface

Note:

- Since there is the possibility of water drops getting inside of the unit, do not directly apply cleanser to the surface.
- Do not scratch the screen with your nails or other hard objects. The resulting scratches or marks will obscure the images.

\triangle Caution

• If water drops or similar wet substances get inside the monitor, it may cause a malfunction.

Notes on Discs

43

How to hold the disc

- Do not touch the underside of the disc.
- Do not scratch the disc.
- Do not bend disc.
- When not in use, keep disc in the case.

Printed side



Do not use discs that fit any of the descriptions given below. Using these discs may damage the discs or cause the unit to malfunction.

Special discs in a shape which is not round





Partly or wholly transparent disc





Wholly transparent disc* Partly transparent disc *Wholly semi-transparent disc may not be played back.

• Discs with adhered labels, etc. on them





Disc with adhered stickers Labels created by a printer or tape



Protective films or sheets

Disc accessories (stabilizers, etc.)

Damaged or deformed discs



Shoddily made discs



Discs with burrs Please remove the burrs before use.



Discs with cracks, scratches or parts missing

Disc insert

The surfaces of new discs tend to be slippery. Therefore, when using such a disc for the first time, it may not load satisfactorily even when it has been inserted into the unit. At a time like this, insert the disc into the unit as far as it will go until it is loaded properly.

- When inserting a disc into or ejecting and removing it from the unit, insert it straight in or eject and remove it straight out in parallel with the unit. Otherwise, the disc may be scratched or marked in the process.
- When inserting a disc, do not put one disc on another. Failure to observe this may cause the discs to be jammed.

Do not leave discs in the following places:

- Direct sunlight
- Near car heaters
- Dirty, dusty and damp areas
- On seats and dashboards

Disc cleaning

Use a dry, soft cloth to wipe from the center outward. Do not attach any seals or labels to your discs. Do not write on the disc label in a heavy pen or ballpoint pen.





<Wrong>

Notes on CD-Rs/RWs, **DVD-Rs/RWs**

- You may have trouble playing back some CD-R/RW, DVD-R/RW discs recorded on CD/DVD recorders (CD-R/RW, DVD-R/RW drives), either due to their recording characteristics or dirt, fingerprints, scratches, etc. on the disc surface.
- CD-R/RW, DVD–R/RW discs are less resistant to high temperatures and high humidity than ordinary music CDs. Leaving them inside a car for extended periods may damage and make playback impossible.
- The unit may not successfully playback a CD-R/RW, DVD-R/RW that was made by the combination of writing software, a CD/DVD recorder (CD-R/RW, DVD–R/RW drives) and a disc if they are incompatible with one another.
- This player does not play CD-R/RW, DVD–R/RW discs if the session is not closed.
- Be sure to observe the handling instructions of CD-R/RW, DVD-R/RW discs.
- This player does not play CD-R/RW, DVD-R/RW discs which contain other than CD-DA or MP3/DivX data.



Language Code List

Subtitle Language	Back
Select Subtitle Language	5555
1 2 3 4 5 6 7 8 9 0	Enter Clear
	© 14:56

DVD language menu (→ page 36)

Code	Language Name
6565	Afar
6566	Abkhazian
6570	Afrikaans
6577	Ameharic
6582	Arabic
6583	Assamese
6589	Aymara
6590	Azerbaijani
6665	Bashkir
6669	Byelorussian
6671	Bulgarian
6672	Bihari
6678	Bengali; Bangla
6679	Tibetan
6682	Breton
6765	Catalan
6779	Corsican
6783	Czech
6789	Welsh
6865	Danish
6869	German
6890	Bhutani
6976	Greek
6978	English
6979	Esperanto
6983	Spanish
6984	Estonian
6985	Basque
7065	Persian
7073	Finnish
7074	Fiji
7079	Faroese
7082	French
7089	Frisian
7165	Irish
7168	Scots Gaelic
7176	Galician
7178	Guarani
7185	Gujarati
7265	Hausa
7273	Hindi
7282	Croatian
7285	Hungarian

In "OTHER" cases... (→ page 36)

Input the four digit language code pressing the buttons **CO** to **CO**. Touch **Enter** to determine.

Note:

• Setting is finished and the display returns to the main menu.

• For retrying selection during number entry, touch Clear .

Code	Language Name
7289	Armenian
7365	Interlingua
7378	Indonesian
7383	Icelandic
7384	Italian
7387	Hebrew
7465	Japanese
7473	Yiddish
7487	Javanese
7565	Georgian
7575	Kazakh
7576	Greenlandic
7577	Cambodian
7578	Kannada
7579	Korean
7583	Kashmiri
7585	Kurdish
7589	Kirghiz
7665	Latin
7678	Lingala
7679	Laothian
7684	Lithuanian
7686	Latvian, Lettish
7771	Malagasy
7773	Maori
7775	Macedonian
7775 7776	Malayalam
7778	Mongolian
7779	Moldavian
7782	Marathi
7783	Malay
7784	Maltese
7789	Burmese
7865	Nauru
7869	Nepali
7876	Dutch
7879	Norwegian
7982	Oriya
8065	Panjabi
8076	Polish
8083	Pashto, Pushto
8084	Portuguese
8185	Quechua

Code	Language Name
8277	Rhaeto-Romance
8279	Romanian
8285	Russian
8365	Sanskrit
8368	Sindhi
8372	Serbo-Croatian
8373	Singhalese
8375	Slovak
8376	Slovenian
8377	Samoan
8378	Shona
8379	Somali
8381	Albanian
8382	Serbian
8385	Sundanese
8386	Swedish
8387	Swahili
8465	Tamil
8469	Telugu
8471	Tajik
8472	Thai
8473	Tigrinya
8475	Turkmen
8476	Tagalog
8479	Tonga
8482	Turkish
8484	Tatar
8487	Twi
8575	Ukrainian
8582	Urdu
8590	Uzbek
8673	Vietnamese
8679	Volapük
8779	Wolof
8872	Xhosa
8979	Yoruba
9072	Chinese
9085	Zulu

Definition of Terms

Dolby Digital

This fully discrete format divides the music signals into 5.1 channels: Front Left (L), Front Right (R), Centre (C), Left Surround (LS), Right Surround (RS) and Subwoofer (SW: 0.1 channel) for recording and playback. The number of channels that are recorded depends on the software. (1 to 5.1 channels)

Manufactured under license from Dolby Laboratories.

"Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

Confidential unpublished works. Copyright 1992–1997 Dolby Laboratories. All rights reserved.

Interactive DVD

An interactive DVD is DVD software which includes multiple angles, multiple plot endings, etc.

Letterbox screen

This refers to a screen on which the playback picture of wide-screen DVDs or VCD (Video CD)s appears with black bands running along the top and bottom.

LPCM (Linear PCM audio)

In this format, the audio signal is converted to digital data and recorded in two channels without compression. Because the capacity of a DVD disc is large, it can store more data with better accuracy than a CD.

Pan & Scan screen

This refers to a screen on which the playback picture of wide-screen DVDs or VCD (Video CD)s is cut off at the left and right sides.

Playback control (VCD (Video CD))

If the VCD (Video CD) has "With Playback Control" or others written on the disc surface or on the jacket, the scenes or information to be viewed (or listened to) can be selected interactively with the screen by looking at the menu shown on the screen. In these instructions, playback using the menu screen is referred to as the "menu play" for video CDs. This player supports Video CDs with playback control.

DivX

DivX is a popular media technology created by DivX, Inc. DivX media files contain highly compressed video with high visual quality that maintains a relatively small file size. DivX files can also include advanced media features like menus, subtitles, and alternate audio tracks. Many DivX media files are available for download online, and you can create your own using your personal content and easy-touse tools from DivX.com.

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

Official DivX[®] Certified product Plays all versions of DivX[®] video with standard playback of DivX[®] media files DivX,DivX Certified, and associated logos are trademarks of DivX, Inc. and are used under license.

Enalish

Specifications

General

• Power supply	: 12 V DC (11 V – 16 V), test voltage 14.4 V, negative ground
• Current consumption	: Less than 10 A (during disc
• Maximum power output	playback) : 50 W x 4 ch
 Power output 	: 20 W x 4 ch
 Compatible speaker 	
impedance	:4Ω
 Video input signal 	: Composite video signal, 1.0 Vp-p (75 Ω)
 Audio input sensitivity 	: 2 Vrms
• Video output signal	: Composite video signal, 1.0 Vp-p (75 Ω)
 Pre-Amp output voltage 	: 2 Vrms
Pre-Amp output impedance	: Less than 600 Ω
• Dimensions (W x H x D)	: 178 x 50 x 165 mm {7" x 1 ¹⁵ / ₁₆ " x 6 ¹ / ₂ "}
 Weight 	: 2.4 kg {5 lbs. 5 oz.}

Front AV input (AV1 IN)

- Input impedance : $47 \text{ k}\Omega$
- Allowable external input : 2.0 V
 Connector : 3.5 mmø Stereo mini pin

	(Equipped with video input
	terminal)
Audio input sensitivity	: 2 Vrms
 Video output signal 	: Composite video signal, 1.0

Vp-p (75 Ω)

FM stereo radio

- Frequency range
 Usable sensitivity
- Stereo separation
- S/N ratio

AM radio

- Frequency range
- Usable sensitivity
- Image rejection ratio

Audio section

- Output voltage/ Impedance
- Frequency characteristics
- Dynamic range
- S/N ratio

Monitor

- Liquid crystal panel
- Screen dimensions (W x H x D)
- Number of pixels
- Valid pixel ratio
- Display method
- Drive method

: 87.9 MHz – 107.9 MHz : 12.2 dBf : 30 dB (1 kHz) : 62 dB

- : 530 kHz 1 710 kHz
- : 28 dB/µV
- : 50 dB
- : 2 Vrms/600 Ω
- : 20 Hz 20 kHz (±1 dB)
- : 96 dB (during CD playback)
- : 95 dB (during CD playback)
- : 7" wide
- : 154 x 87 x 177 mm {6 ¹/₁₆" x 3 ⁷/₁₆" x 6 ¹⁵/₁₆"}
- : 336 960 pixels (234 vertical x 480 horizontal x 3)
- : Over 99.99%
- : Transparent color filter format
- : TFT (Thin Film Transistor) active matrix format

Above Specifications comply with EIA standards.

Power Output: 20 W RMS x 4 Channels at 4 Ω and \leq 1% THD+N Signal to Noise Ratio: 80 dBA (reference: 1 W into 4 Ω)	CEA-2005 Change

Note:

- Specifications and the design are subject to modification without notice due to improvements in technology.
- Some figures and illustrations on this manual may be different from your product.

English

Panasonic Consumer Electronics Company, Division of Panasonic Corporation of North America One Panasonic Way, Secaucus, New Jersey 07094 http://www.panasonic.com

Panasonic Sales Company, Division of Panasonic Puerto Rico, Inc. ("PSC") Ave. 65 de Infantería, Km. 9.5 San Gabriel Industrial Park, Carolina, Puerto Rico 00985 http://www.panasonic.com

Panasonic Canada Inc. 5770 Ambler Drive, Mississauga, Ontario L4W 2T3 http://www.panasonic.ca

©2007 Matsushita Electric Industrial Co., Ltd. YFM264C063CA

CA PTW1107-1018

Printed in China Imprimé en Chine Impreso en China